

Exhibit 20

FAN ARRAY CLAIM CONSTRUCTION REPORT

1. I, Albert V. Karvelis, have been asked by counsel for Huntair, Inc. (“Huntair”) to analyze claim construction issues related to terms from the Claims of U.S. Patent Nos. 7,179,046 and 7,137,775 (‘046 Patent” and ‘775 Patent”). This report sets forth my opinions and bases for those opinions concerning claim construction. I expect that I will offer additional opinions in this matter according to the timetable set for expert discovery by Judge Coar. The opinions I set forth herein are my own and are based on my research in this matter and the education, experience, training and skill I have accumulated in the course of my 40 year career in engineering. Between now and such a time that I may be asked to testify, I expect to continue my review, evaluation and analysis of information generated during discovery, as well as of relevant evidence presented at trial.

QUALIFICATIONS

2. I, Albert V. Karvelis, Ph.D., P.E., am a licensed Professional Engineer in Illinois, Texas, Connecticut, Michigan, Wisconsin and Florida with over 40 years of engineering experience. I am currently employed by Packer Engineering, Inc. (“Packer”) in Naperville, Illinois, as Senior Vice President. I joined Packer in 1989. Packer is a multidisciplinary engineering and scientific consulting and technical services company. My responsibilities with Packer include mechanical engineering consulting and testing with respect to machinery design and performance, manufacturing processes, and failure analysis in addition to various management duties.

3. I am an active member of the American Society of Mechanical Engineers in the Design Engineering Division and the Codes & Standards Division for over 25 years. A copy of my *curriculum vitae* is attached as Appendix A. A list of cases in which I have testified at deposition or trial during the last four years is attached as Appendix B.

4. In 1966, I received my bachelor’s degree in Aerospace Engineering from the University of Michigan. In 1967, I received my master’s degree in Engineering, also from the University of Michigan. I accepted a faculty position in the Mechanical Engineering Department at the Pennsylvania State University. In 1975, I received my doctorate in Engineering Acoustics from the Pennsylvania State University.

5. From May 1975 to January 1989, I was employed by the Trane Company, Babcock & Wilcox and Borg Warner as engineer and manager. I am familiar with mechanical design and patent matters as a result of my activities at the University of Michigan Institute of Science & Technology, U.S. Navy, Trane, Babcock & Wilcox, Borg Warner and Packer Engineering. I was originally trained in patent analysis while serving on active duty in the US Navy with the Office of Naval Research.

6. The subject technology of the patents-in-suit is HVAC equipment design and performance. The specific HVAC equipment that is the subject of the asserted patents is: air handling systems or “air handlers.” I have significant engineering experience with Heating Ventilating and Air Conditioning (HVAC) equipment design and performance. The experience includes component design and test for Trane Company and York International, the two of the

three leading HVAC manufacturers in the USA. I have also conducted failure analysis of hospital, hotel and dormitory and tunnel air handling equipment while at Packer Engineering. I am a person of at least ordinary skill in the art.

7. In the course of my research, I have studied the patents-in-suit, portions of their prosecution history, Plaintiff's Preliminary Infringement Contentions disclosure, and Webster's Third New International Dictionary of the English Language, Unabridged (2002).

8. I am a salaried employee of Packer Engineering. Packer Engineering charges an hourly rate of \$350 for my time, plus reasonable expenses.

CLAIM CONSTRUCTION

9. I reviewed the asserted claims of the '046 and '775 Patents. I find that the claim terms are readily understood by a person of ordinary skill in the art of designing air handling systems for conditioning the air of structures. I have reviewed the claim construction positions offered by ClimateCraft, and find that they have incorporated many extraneous limitations into the claims.

10. The term "fan array" in the context of the '046 and '775 Patents means a "plurality of fan units arranged in a grid, a spaced pattern, a checkerboard, rows slightly offset, or a staggered array configuration."

11. The term "air handling compartment" means "the inlet plenum, fan section and discharge plenum." The patent terminology is consistent with the ordinary and customary usage of the term "air handling compartment." I will also provide definition of the term "plenum" as used in the art, if requested.

12. The term "a control system for operating said plurality of fan units at substantially peak efficiency by strategically turning on and off selective ones of said plurality of fan units" means: "operating the fan units at nearly peak efficiency by strategically turning on and off selective ones of the fan units by using a manual or automatic control."

13. The term "a control system for operating said plurality of fan units, said control system allowing control of the speed of the fan units in said plurality of fan units such that they run at substantially peak efficiency" means: "operating the fan units at speeds achieving nearly peak efficiency by using a manual or automatic control."

14. In my opinion, a person of ordinary skill in the art would readily understand that there are at least two strategies for "turning on and off" individual fans driven by electric motors as practiced in the HVAC art: manual operation and automatic/programmable controllers. Claims depending from the independent claim specifically limit the dependent claim to the programmable controllers. Similarly, the speed of individual fans, singly or collectively, may also be set either manually or automatic/programmable means. In my opinion, a person of ordinary skill in the art would understand that the claim term "control system for..." is meant to be broad and to include manual as well as automatic/programmable control strategies in the context of the asserted patents.

15. I have also reviewed the position submitted by ClimateCraft. The ClimateCraft definition requires, among other things, automatically determining if fans should be turned off, and automatically turning off fans. ClimateCraft consistently inserts the term “automatic” in all their proposed claim constructions for “control system” which sets either speed or on/off state. There is no such limiting requirement in the claims of the ‘046 Patent that refer to a “control system.” There are claims in the patent which are directed to a preferred embodiment where the fan array is under automatic control (see the discussion regarding the programmable array controller below), but the “control system” contains no such limitation or requirement. Accepting ClimateCraft’s position results in no substantial difference between an “array controller” and a “control system” as the terms are used in the patents.

16. My understanding is supported by the patents themselves. The specification states that “[f]or example, in the 5x5 fan array such as that shown in FIGS. 5, 13, and 14, **a person** desiring to control the array may select desired air volume, a level of air flow, a pattern of air flow, and/or **how many fans to operate.**” (‘046 Patent, Col. 7, ll. 4-7). The specification also states that “[a] control system (that may include the array controller 300) would be used to take fan units 200 on line (an “ON” fan unit 200) and offline (an “OFF” fan unit 200) individually.”

17. ClimateCraft defines “peak efficiency” as the term is used in the patents to refer to the “maximum achievable static efficiency for a fan unit...” This is not a definition that is consistent with the art, in my opinion. First of all, reference to the 2008 ASHRAE Handbook provides support for the mechanical efficiency as being the more appropriate choice for general fan efficiency and not static efficiency. Second, the ClimateCraft definition implicitly ignores the fact that the mechanical efficiency of a given fan design can be different at different speeds and therefore their construction would therefore make the preferred embodiment specification internally inconsistent. Third, the ASHRAE Handbook makes clear that “the optimum selection range or peak efficiency point is identified in various ways by different manufacturers.” The term “maximum achievable static efficiency” operating point for a fan unit is not a term that is recognizable in the art.

18. The ASHRAE Handbook and the ‘046 specification both discuss in some detail, the issue of surge/instability induced by the use of two fans. The ClimateCraft definition applied to the claims would preclude the adoption of the industry practice of adapting to system and surge effects in the fan array claimed inventions. A person of ordinary skill in the art would understand that that is one more reason for finding the ClimateCraft definition unreasonable and unlikely to be adopted. For at least these above stated reasons, I find the ClimateCraft definitions incorrect.

19. In my opinion, a person of ordinary skill in the art would understand the term “peak efficiency” to mean the “optimizing the ratio of power delivered by the fans to the electrical power consumed by the fans.”

20. ClimateCraft further proposed a construction of the term “a control system for controlling the speed ... peak efficiency” by incorporating requirements that describe the use of automatic determination of which fans speeds should be increased and which should be

decreased. Their construction is completely unjustified because it incorporates a specific and detailed control strategy that is not found in the original claim term.

21. Furthermore, the asserted patents refer to efficiency of the “fan units” each of which is defined as at least the “inlet cone, a fan, and a motor.” (Col. 1, ll. 46-47). The “strategically turning on and off” control claim term does not require that each individual fan unit run at peak static efficiency as proposed by ClimateCraft. A person of ordinary skill in the art, in my opinion, would understand that “strategically turning on and off selective ones [fan units]” cannot result in the “static efficiency” of each of the remaining running fans becoming optimized simply because one or more individual units were turned off or on, as would be required by the proposed by ClimateCraft construction.

22. This further supports my understanding that the efficiency as used in the patents refers to mechanical power efficiency (“[u]sing a control system to take fan units on line and off line allows a user to control **power usage** and/or air flow”).

23. I understand that ClimateCraft may offer an expert witness in support of its claim construction positions. I reserve the right to provide further opinions based on my review of his or her report. If asked, I will prepare and present an overview, to the Court, of the HVAC technology relevant to the determination of proper construction of the disputed claim terms.



Albert V. Karvelis

June 19, 2008

Date

APPENDIX A

Albert V. Karvelis, Ph.D., P.E.

Senior Vice President

SUMMARY OF QUALIFICATIONS

Over 30 years of industrial experience in performing and managing product design, testing and improvement, and R & D. Experience includes aerospace, power generation, automotive, HVAC, medical devices industries with respect to: product performance, life-cycle analysis and testing, design, manufacture, safety and failure analysis.

PROFESSIONAL EXPERIENCE

2001-Present PACKER ENGINEERING - Naperville, Illinois
Senior Vice President

Responsible for corporate business development and consulting in industrial machinery practice areas. Conducted major design review for gear motors in industrial and consumer product applications. Practice also includes machine design, safety, failure analysis and intellectual property analysis. Production equipment performance testing/evaluation includes material handling, automated welding, assembly line and fabrication machinery.

Led major failure investigations of complex failures of 5000 HP compressors in Canada and South America which identified new design improvements. Successfully developed accelerated life testing procedures and performed tests for industrial valves resulting in design life and safety improvements. Provided training to mid-size machinery builders in conducting and integrating Product Safety Risk Assessment into the design process.

Assisted in establishing a Forensic Engineering course at Northwestern University (CE 432). Lectured on topic "Ethics and Safety in Design."

Active service on standards committee resulting in the publication of ANSI/ASME B15.1-2000 Safety Standard for Mechanical Power Transmission Apparatus.

Currently participating on AMT Working group drafting the General Machine Tool Safeguarding Standard as part of the B11 series.

1989-2001 Vice President

Responsible for Mechanical, Electrical, Human Factors, Biomedical and Machinery groups. Consulting services in design analysis, independent review, failure analysis and accident reconstruction in transportation, industrial equipment, consumer products and process/manufacturing. Performed safety analyses of equipment and processes.

Principal Investigator of NIH-SBIR, design of an electro-mechanical device for treating the symptoms of Meniere's disease. Performed patent infringement and trade secret analyses and served as arbitrator for machinery performance dispute resolution. Directed activities in vibration analyses for industrial products including large compressor stations and engine/generators.

Directed custom field and laboratory life/performance testing of consumer and industrial products.

Completed 15 years of conducting the "Safety & Ethics in Design" Seminar at Northern Illinois University. Elected to Association of Manufacturing Technology safety standards drafting committee, resulting in publication of: ANSI/AMT B11.10 - 2000 – Safety Requirements for Metal Saws.

1982-1989 Borg Warner Corporation, Technical Center - Des Plaines, Illinois
 Manager Engineering Mechanics

Responsible for Mechanical Design Technology, CVT, Heat Transfer & Fluid Mechanics and Vibration/Acoustics Groups. Directed activities in power-train design/analysis technology, manufacturing technology, hydraulic power systems, robot simulation and failure analysis. Group staff generated 51 new patent filings in four years in transmission components.

Provided technical support on HVAC technology for York International.

Directed stationary dynamometer and test track testing technology for vehicles and power-train components. Responsible for development of the first 3-D modeling and flow test verification using Laser Doppler Velocimetry for mapping the internal flows of automotive torque converters. Member of the Real Time Chiller Diagnostics Team which developed the prototype software and hardware to alert a central station when maintenance and or repair is required for a central system building chiller integrated with the security system.

Led joint GM-Borg Warner Task Force to solve truck driveline dynamic problems. Task Force produced first system model for torsional and transient drive-train analysis incorporating chassis and suspension dynamics. Led joint Ford-Borg Warner task force to solve gear rattle problems for drive-trains using non-linear drive-train models. Provide support to Japanese auto makers to diagnose and solve shudder problems in prototype vehicles.

Supervisor - Dynamics Group

Responsible for developing the Vibration & Acoustic Laboratory. Provided technical support to the Automotive, Chemical, Industrial Pump, Refrigeration and Security Divisions. Conducted research in transmission and driveline dynamics and CVT technology.

Developed with NVH team, the transmission noise simulator for subjective evaluation of design modification changes. Directed the development of transient dynamics of automotive drive trains and industrial gear pump equipment. Directed the development of the transformation toughened zirconia[®] high pressure (6000psi) hydraulics sensor for John Deere applications.

1977-1982 Babcock & Wilcox Research Center, Mechanical Engineering Laboratory -
Alliance, Ohio
Acting Supervisor, Flow-Induced Vibration

Performed activities of flow-induced vibration modeling for helical steam exchangers. Directed flow performance testing of helical HX at Argonne National Laboratory for Clinch River Breeder Reactor as Project manager for DOE. Directed development of the finite-difference computer modeling and steam flow testing for the Electric Power Research Institute and the US Navy. Performed field failure analysis and design review of power-plant equipment and coal slurry flow measurement technology.

1977-1981 Senior Research Engineer

Performed engineering mechanics testing and analysis in dynamics. Led the Vibration Instrumentation Team which developed, qualified and installed sensors at the Oconee and TMI-II nuclear power reactors. As part of the qualification, personally directed vibration, fatigue, flow and wear testing for steam generator monitoring equipment for Nuclear Regulatory Commission approvals. Developed flow model for flow and wear prediction associated Fluidized Bed Boiler tubes.

As consultant to Babcock & Wilcox Valve Division, assisted in the design testing, manufacturing and failure analysis of pressure reducing valves used in 5000-10000psi service. Assisted in the design of a valve blow down test facility in Irvine facility. Consulted to Babcock & Wilcox, Canada, in mechanical engineering issues.

1975-1977 The Trane Company, Technical Center - LaCrosse, Wisconsin
 Research Engineer

Developed and implemented vibration and acoustic instrumentation and analysis technology for use in reciprocating and centrifugal compressors. Performed failure analysis in refrigeration equipment and heat exchangers. Developed models for pulsation control in vaneless diffusers and vibration of reciprocating compressor drivelines. Test responsibility for reciprocating compressors and centrifugal chiller compressors.

1974-1975 Penn State University, Department of Mechanical Engineering -
 University Park, Pennsylvania
 FRA – (Faculty Rank)

Supervised Graduate Students in valve testing and digital signal processing.

1971-1975 Department of the Navy, Office of Naval Research
 Reserve Unit 4-4 - State College, PA
 Executive Officer

1970-1974 NASA Fellow

Doctoral research and course work. Consultant to U.S. Navy Applied Research Laboratory in dynamics and to several valve manufacturers. Designed and built the Penn State Valve Flow and Noise Test Facility. Conducted performance evaluation testing of conventional and novel valve designs. Performed in-plant evaluations of high speed production machinery as consultant in machinery design.

1967-1970 U.S. Navy, Naval Air Systems Command Headquarters, Propulsion Division -
 Washington, D.C.

Initially served as Student Naval Aviator after commissioning as Ensign, USNR-R in 1968. In May 1969 ordered to serve at the Naval Air Systems Command Headquarters serving as Senior Project Officer: responsible for all research, development, test and evaluation for reciprocating engines and propeller systems. Directed activities in product improvement, failure analysis and maintenance technology. Coordinated activity with U.S. Air Force, US Army and foreign embassies. Monitored and approved qualification testing of seals, gears, hydraulics and pistons. Leader/team member engine and drive train failure analysis task force including P-2/3, C-2, and C-130 aircraft problems.

1963-1967 University of Michigan, Institute for Science and Technology -
Ann Arbor, Michigan

Performed design and testing in support of geophone signal processing in 1963. Designed and built instrumentation and performed qualification testing for NASA sponsored Mach 8 wind tunnel. This tunnel was the only laminar boundary layer hypersonic wind tunnel in the free world. Conducted extensive flow testing of gas ejector pumps. Consulted in optimizing of rocket propulsion firing for Booze Allen. Developed a novel method of firing of stoichiometric to achieve optimum orbit insertion.

ACADEMIC

Ph.D.	Pennsylvania State University (Engineering Acoustics) - 1975
M.S.E.	University of Michigan (Aeronautical Engineering) - 1967
B.S.E.	University of Michigan (Aeronautical Engineering) - 1966
1974-1975	Staff Faculty Member, Department of Mechanical Engineering, Pennsylvania State University
1970-1974	NASA Fellow, Department of Mechanical Engineering, Pennsylvania State University
1986-1990	Adjunct Professor of Mechanical Engineering, Northern Illinois University, teaching graduate courses in Advanced Vibration; Fatigue and Fracture Mechanics. Senior Mechanical Design Project: Safety and Ethics in Design
1990-2005	Northern Illinois University, Department of Mechanical Engineering, Lecturer in ME 482 Mechanical Design – “Safety & Ethics in Design”
2005	Lecturer on “Safety and Ethics in Design & Philosophical Underpinnings of Engineering Ethics” Northwestern University CIV ENG 395-0.

REGISTRATIONS

Licensed Professional Engineer, State of Illinois (License No. 062-050540)
Licensed Professional Engineer, State of Michigan (License No. 6201051092)
Licensed Professional Engineer, State of Wisconsin (License No. 36728-006)
Licensed Professional Engineer, State of Connecticut (License No. 24271)
Licensed Professional Engineer, State of Florida (License No. 62164)
Licensed Professional Engineer, State of Texas (License No. 97096)

PROFESSIONAL SOCIETY MEMBERSHIPS

- American Society of Mechanical Engineers (ASME)
 - ASME Codes & Standards B.15 Committee, “Safety Standards for Mechanical Power Transmission Apparatus”
 - Technical Paper/Book Reviewer for ASME Design Engineering Division
- ASME Design Engineering Division Power Transmission & Gearing Technical Committee since 1986
- Western Society of Engineers – Trustee
- American National Standards Institute/Association for Manufacturing Technology B11.10 Metal Saw Safety Standards Drafting Committee since 2000
- Human Factors & Ergonomics Society, Paper Reviewer
- Society of Automotive Engineering (SAE)
- The National Science Foundation / United States Civilian Research & Development Foundation - Proposal Reviewer
- The Institute of Electrical and Electronics Engineers, Inc. – Member
- Fluid Power Society – Member
- Instrument Society of America - Committee
- The Technical Association of the Pulp & Paper Industry – (TAPPI) - Member
- National Bureau of Standards, U.S. Navy - Mechanical Failures Prevention Group Committee Member
- American Institute of Physics – Advisory Board Reviewer 1972-75

PROFESSIONAL ACTIVITIES SUMMARY

2007	ASME International Design Engineering Technical Conferences, Session Organizer, Paper Reviewer, Las Vegas, Nevada
2007	HFES 51 st Annual Meeting, Papers Reviewer, Assigned Co-Chair Warning Session, Baltimore, Maryland
2005	ASME International Design Engineering Technical Conferences, Session Organizer, Paper Reviewer, Long Beach, California
2003	ASME Design Engineering Technical Conference, Paper Reviewer, Session Chair, Chicago, Illinois
2002-Present	Northern Illinois University, Department of Mechanical Engineering Industrial Advisory Board, Member
2002	ASME Design Engineering Technical Conference, Paper Reviewer, Session Chair, Montreal, Quebec
2000	ASME Design Engineering Technical Conference 2000 Session Organizer, Technical Session Chair, Baltimore, Maryland

- 1998 Human Factors Society Technical Programs Committee Annual Conference
- 1996 Chairman, ASME 7th International Power Transmission and Gearing Conference, San Diego
- 1992 American Society of Mechanical Engineers - 6th International Power Transmission and Gearing Conference, Session Chairman, "Transmissions"
- 1991 SAE International Congress & Exposition, Session Chairperson, "Side Impact Occupant Protection Technologies"
- U.S. Small Business Administration - Small Business Innovation Research Program, Invited Speaker, "Small Business R & D - The Not So Obvious Benefits"
- 1990-1991 Society of Automotive Engineers Personal Watercraft Safety Committee
- 1989 American Society of Mechanical Engineers 5th International Power Transmission and Gearing Conference, Session Organizer and Session Chair, San Diego CA
- Industrial Research Exposition/Conference, Session Chairman, "Recent Trends in Mechanical Design," September 1989, Chicago, IL
- 1989 Industrial Research Exposition/Conference, Organizer/Session Chair, "Recent Trends in Mechanical Design - Coordinating Design with Manufacturing," September 1989, Chicago, IL
- 1987 American Society of Mechanical Engineers Design Technology Conference, Session Organizer, "Micro-Computer Applications in Vibrations," Proceedings Editor
- 1986 Department of Mechanical Engineering, Purdue University; Pennsylvania State University, Invited Speaker, "Industrial Engineering Practice"
- 1985-1987 Industrial Liaison Board – Massachusetts Institute of Technology
- Mechanical Failures Prevention Group (sponsored by Office of Naval Research & National Bureau of Standards), Reliability and Maintainability Conference, Naval Air Test Center, Session Chairman, "Wear Monitoring"
- American Society of Mechanical Engineers Design Division, Technical Committee on Sound and Vibration, 1980-1984; Vice Chairman, 1982-1984

1985-Present ASME Power Transmission Gearing Technical Committee; Chairman 1992 - 1996, Member 1985 to present

1984-1987 NBS/U.S. Navy, Mechanical Failures Prevention Group, Committee Member

1984 American Society of Mechanical Engineers 4th International Conference on Power Transmission, Session Chairman

Mechanical Failures Prevention Group Conference, Session Chairman, "Artificial Intelligence, Diagnostics," Gaithersburg, MD

Acoustical Society of America, S-4 Standards Committee Member, 1982 - 1984

1982-1988 Borg Warner Corporate Sensor Technology Committee and Mechanical Engineering Patent Committee

1979-86 ASME Design Engineering Technical Committee Sound & Vibration, member and Vice-Chair 1984 - 1986

1981 American Society of Mechanical Engineers Design Engineering Conference, Session Organizer and Chairman of Session 3.1, "Integrating Dynamic Testing into the Design and Development Cycle" Boston MA

1980 American Society of Mechanical Engineers Design Engineering Conference, Organizer and Chairman, "Signal Processing" Session

OAI Digital Time Series Analysis Short Course, Lecturer, "Quality Assurance and Computer Software," Santa Clara, CA

1972-1976 Instrument Society of America, Standards and Practices Committee: SP-79, Control Valve Noise Measurement and Prediction

1972-1975 American Institute of Physics Advisory Panel on Publishing

1970-1975 Executive Officer, Office of Naval Research Reserve Unit 4-4, State College, PA

Summer Active Duty 1972-1973: Chicago ONR Office Technical Audit of ONR sponsored research at Mid-West Universities

Summer 1974 - Pentagon, Office of the Chief of Naval Operations, responsible for drafting OPNAVINST 3605 - Environmental Policy Manual for Military Airports

PUBLICATIONS

1. "Internal Wall Pressure Field Studies Downstream from Orificial-Type Valves," Instrument Society of America, Paper 74-827, 1974 with G. Reethof.
2. "Valve Noise Research Using Internal Wall Pressure Fluctuations," INTERNOISE-74 Proceedings, 1974, with G. Reethof.
3. "A Cross-Correlation Technique for Investigating Internal Flow Noise," ASME Proceedings Noise & Fluids Engineering, November 1977, with G. Reethof.
4. "Practical Considerations in Noise Testing of Quiet Valves," INTERNOISE-80 Proceedings, December 1980, with D. Minoofar.
5. "Fluid Dynamic Forces in an Atmospheric Fluidized Bed Combustor," Proceedings, Fluid Mechanics of Combustion Systems, ASME, June 1981 with W. Lapple.
6. "Acoustic Monitoring of Nuclear Safety and Relief Valves," EPRI Final Report No. 3332, December 1983, with D. Raj, et al.
7. "A Systems Approach to Reducing Gear Rattle," SAE Technical Paper 870396, presented at SAE Congress, February 1987.
8. Editor, Advanced Topics in Vibration, ASME Publication DE-Vol. 8, 1988.
9. "3-D Coordinate Reconstruction of High Speed Mechanically Dynamic Experiments," co-authored with A. Liubinskis and C. Anderson, presented at Image Acquisition & 10 Image Processing of Optical Engineering Midwest Conference, September 27-28, 1990.
10. "Computer Aided 3-D Surface Reconstruction During High Speed Crush Events," SAE Special Publication SP-851, Technical Paper No. 910320, February 1991.
11. Pressure Delivery Device for Meniere's Disease, Report to Public Health Service, National Institute of Health, National Institute of Deafness and Other Communication Disorders, November 9, 1993, with Kathleen Campbell.
12. "Self-Locking Worm Gears: Fact or Fiction?" Power Transmission Design, March 1996.
13. "A Contextual Analysis of the Effectiveness of Backup Alarms," 14th International System Safety Conference Proceedings, August 12-17, 1996.
14. Editor, Proceedings of the 7th International Power Transmission and Gearing Conference, 1996.

15. D.G. Curry and A.V. Karvelis, "Ergonomics" in H. Geng (ed.), Manufacturing Engineering Handbook, Chapter 58, pp. 58.1-58.40, New York: McGraw-Hill June 2004.

APPENDIX B

ALBERT V. KARVELIS, Ph.D, P.E.
TESTIMONY LIST

U-Line Corporation vs Ranco North America, L.P.

Circuit Court, Milwaukee County, Wisconsin
No. 00-CV-3941
Trial Testimony, Milwaukee, WI
August 17 and 18, 2004

Vera Prohoroff, John Prohoroff, Jr., & Michael Prohoroff vs Liebherr Crane, et al

Central District of California, Western Division
No. CV-02-7843 SJO
Deposition Testimony, Long Beach, CA
September 30, 2004

Nervil Anofils vs General Motors Corporation

Circuit Court of the Thirteenth Judicial Circuit in and for Hillsborough County, Florida
No. 97-1246 Div. F; 97-0966 Div. C; 98-4177 Div. B; 97-294-W
Deposition Testimony, Orlando, FL
October 29, 2004

Advanced Technology Materials, Inc. vs Praxair, Inc.

US District Court for the Southern District of New York
No. 03 CV 5161
Deposition Testimony, New York City, NY
January 6, 2005, May 25, 2005

**Freni Brembo and Brembo North America, Inc. vs Alcon Components, Ltd.
and Alcon Components (USA) Inc.**

US District Court for the Northern District of Illinois, Eastern Division
Deposition Testimony, Chicago, IL
January 14, 2005

Joseph Todd Culpepper and Dawn Culpepper vs Controlled Automation

US District Court for the Middle District of Georgia, Columbus Division
No. 4:03 CV-47-2
Deposition Testimony, Chicago, IL
February 14, 2005

HWH Corporation vs Saint Gobain Performance Plastics Corporation

US District Court for the Northern District of Iowa, Cedar Rapids Division
No. C02-156
Deposition Testimony, Naperville, IL
April 7, 2005

David Mendez vs Davis Iron Works. Ltd., Kranco, Inc., et al

US District Court, McLennan County, Texas
No. 2001-3829-3
Trial Testimony, Waco, TX
April 20, 2005

Albert V. Karvelis, Ph.D., P.E.
Testimony List

Praxair, Inc. v. Advanced Technology Materials, Inc.

US District Court for the District of Delaware
No. 03-1158-SLR
Deposition Testimony, New York, NY
June 30, 2005

Techtronic Industries Co. Ltd. and Richard Pando v. Chervon et. al.

US District Court for the Northern District of Illinois, Eastern Division
No. 05 C 4370
Deposition Testimony, Chicago, IL
August 5, 2005

Dalrymple v. The Harris Waste Management Group, Inc. and IPS Balers, Inc.

US District Court for the Eastern District of Arkansas, Pine Bluff Division
No. 5:04 CV006 GH
Deposition Testimony, Little Rock, AR
August 11, 2005

Vance (Anthony) v. Akers Packaging Service, Inc. et. al.

Court of Common Pleas, Butler County, Ohio
No. CV 2003 03 0803
Deposition Testimony, Naperville, IL
October 6, 2005

Praxair, Inc. v. Advanced Technology Materials, Inc.

US District Court for the District of Delaware
No. 03-1158-SLR
Trial Testimony, Wilmington, DE
November 30, 2005

Dalrymple v. The Harris Waste Management Group, Inc. and IPS Balers, Inc.

US District Court for the Eastern District of Arkansas, Pine Bluff Division
No. 5:04 CV006 GH
Trial Testimony, Little Rock, AR
December 7, 2005

Hershey v. Black & Decker, Inc.

State of Michigan, Circuit Court for the County of Wayne
No. 04 416541 NP
Deposition Testimony, Troy, MI
January 5, 2006

Aubin Industries, Inc. v. Jeff Smith, et. al.

US District Court, Southern District of Ohio, Western Division
No. C-1-04-681
Deposition Testimony, Naperville, IL
April 17, 2006

Albert V. Karvelis, Ph.D., P.E.
Testimony List

Salisbury (Jackson & Vicky) v. Kansas Jack, Inc., et. al.

US District Court for the Western District of Pennsylvania
No. 96-1946
Trial Testimony, Washington, PA
June 8, 2006

DBHL, Inc. and Dearborn HL, S. DE R.L. DE C.V. v. Moen Incorporated, and Moen Sonora S.A. DE C.V.

US District Court, 295th District, Harris County, Texas
No. 2004-71621
Deposition Testimony, Chicago, IL
August 24, 2006

Dachelet and Curwood v. Battenfeld Gloucester Engineering Company, et. al.

State of Wisconsin, Circuit Court, Winnebago County
No. 03-CV-0937
Deposition Testimony, Milwaukee, WI
October 3, 2006

Gibson (Timothy) v. Precision Strip, Inc. [Highlight Industries]

State of Ohio, Court of Common Pleas, Butler County
No. CV05-04-1161
Deposition Testimony, Naperville, IL
May 21, 2007

Amato (William) v. Wirgten America, Inc.

US District Court, Eastern District of Virginia, Norfolk Division
No. 2:06cv379
Deposition Testimony, Chicago, IL
June 15, 2007

Taylor v. Kamco, Inc., et. al.

Circuit Court of the Second Judicial Circuit in and for Leon County, Florida
No. 06-CA-545
Deposition Testimony, Naperville, IL
July 12, 2007

McKeon v. The Chamberlain Group, et. al.

US District Court for the Eastern District of New York
No. 06-CV-1272
Deposition Testimony, Chicago, IL
July 13, 2007

Geo. M. Martin Company v. Alliance Machine Systems International, LLC

US District Court, Northern District of California
No. C 07 00692 WHA
Deposition Testimony, San Francisco, CA
March 20, 2008

Albert V. Karvelis, Ph.D., P.E.
Testimony List

Langeman Manufacturing, Ltd. v. Rhino Linings, etc. al.
US District Court, Western District of Wisconsin
No. 07-C-0411-C
Deposition Testimony, Chicago, IL
May 27, 2008

June 19, 2008